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Decomposability of low 2-computably enumerable degrees and turing jumps in the ershov hierarchy

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Abstract

In this paper we prove the following theorem: For every notation of a constructive ordinal there exists a low 2-computably enumerable degree that is not splittable into two lower 2-computably enumerable degrees whose jumps belong to the corresponding Δ-level of the Ershov hierarchy.

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Keywords

2-computably enumerable degrees, Constructive ordinals, Ershov hierarchy, Low degrees, Turing jumps